

**REMARKS**

In the Office Action, the Examiner rejected claims 1-23 under 35 U.S.C. §102(b) as being anticipated by the Broberg patent.

In Figure 1, the Broberg patent discloses a ring laser gyroscope having a block 10 provided with interior passages 11, 12, and 13. Mirrors 14, 15, and 16 are provided at the corners of the block 10. A cathode 30 and anodes 17 and 21 engage corresponding surfaces of the block 10 at openings 31, 20, and 22. A source 50 supplies an electric potential across the cathode 30 and the anodes 17 and 21. The positive terminal of the source 50 is connected to the anodes 17 and 21, and the negative terminal of the source 50 is connected to the cathode 30.

In Figure 2, the Broberg patent discloses a similar arrangement except that a conductive strip is placed on the block 10 over the passages 11, 12, and 13 between the cathode 30 and the anodes 17 and 21. During start up when a switch 230 is closed, the conductive strip 210 is connected to the positive terminal of the source 50.

Figures 3 and 4 of the Broberg patent show similar embodiments.

Independent claim 1 is directed to a gas discharge tube comprising a block, a cathode, and an anode. At least a portion of the block is maintained at a reference potential. The cathode engages the block and is biased at a higher potential than the reference potential. The anode engages the block and is biased at a higher potential than the cathode.

The Broberg patent shows that the anodes 17 and 21 are biased at a higher potential than the cathode 30. However, the Broberg patent does not disclose that the cathode 30 is biased at a higher potential than the reference potential at which the block 10 is maintained. Even if the conductive strip is considered, this conductive strip is biased at the same potential as the anodes.

Therefore, the Broberg patent does not anticipate independent claim 1.

Independent claim 8 is directed to a gas discharge tube comprising a block, a cathode, and an anode. At least a portion of the block is maintained at a reference potential. The cathode is biased at a lower potential than the reference potential, and the anode is

biased at a higher potential than the reference potential.

The Broberg patent does not disclose that the cathode 30 is biased at a lower potential than the reference potential at which the block 10 is maintained, and the Broberg patent does not disclose that the anodes 17 and 21 are biased at a higher potential than this reference potential. Even if the conductive strip is considered, this conductive strip is biased at the same potential as the anodes.

Therefore, the Broberg patent does not anticipate independent claim 8.

Independent claim 15 is directed to a gas discharge tube comprising a cathode, an anode, a block, and a biasing electrode. The block is engaged by the cathode and anode, and the block comprises a plasma supporting passage between the cathode and the anode. The biasing electrode overlies the passage and extends substantially between the cathode and the anode, and the biasing electrode has a bias to attract positive alkali ions.

The Broberg patent does not disclose that the electrically conductive strip 210 has a bias to attract positive alkali ions. The Broberg patent merely

discloses that the electrically conductive strip 210 assists in the start up of lasing.

Therefore, the Broberg patent does not anticipate independent claim 15.

Dependent claims 2, 4, 6, 9, 11, 13, 17, 19, 21, and 23 recite that the reference potential is substantially ground. The Broberg patent does not disclose that any part of the block 10 is at ground potential, the Broberg patent does not disclose the potential of either of the terminals of the source 50 with respect to ground, and the Broberg patent does not use the ground symbol anywhere in the drawings.

If the Examiner has found disclosure in the Broberg patent to the contrary, the Examiner is requested to cite such specific language or showing to applicant. The portions cited by the Examiner in the Office Action do not make reference to the block 10 being at ground potential and do not make any reference to the terminals of the source 50 being at any potential with respect to ground. The Broberg patent only shows the polarity of the terminals with respect to one another.

Therefore, the Broberg patent does not anticipate dependent claims 2, 4, 6, 9, 11, 13, 17, 19, 21, and 23.

Dependent claims 3, 7, 10, and 14 recite that a biasing electrode overlies the plasma supporting passage and has a bias to attract positive alkali ions. As discussed above in connection with independent claim 15, the Broberg patent does not disclose that the electrically conductive strip 210 has a bias to attract positive alkali ions. The Broberg patent merely discloses that the electrically conductive strip 210 assists in the start up of lasing.

Therefore, the Broberg patent does not anticipate dependent claims 3, 7, 10, and 14.

Dependent claims 12, 18, 20, and 22 recite certain biasings of the biasing electrode with respect to the reference potential.

The Broberg patent does not disclose the recited biasings of the electrically conductive strip 210 with respect to a reference potential of the block 10.

Therefore, the Broberg patent does not anticipate dependent claims 12, 18, 20, and 22.

Dependent claims 16 recites that at least a portion of the block is maintained at a reference potential, that the cathode is biased at a higher potential than the block, and that the anode is biased at

a higher potential than the cathode. As discussed above,  
the Broberg patent does not disclose these potentials.

Therefore, the Broberg patent does not  
anticipate dependent claim 16.

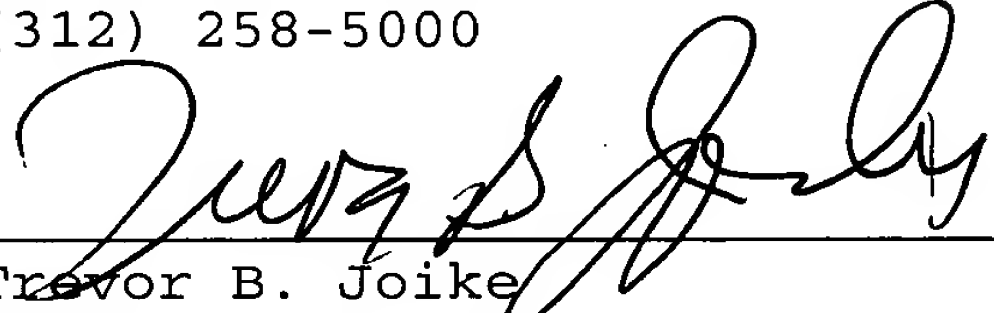
**CONCLUSION**

In view of the above, the claims of the present application patentably distinguish over the art applied by the Examiner. Accordingly, allowance of these claims and issuance of the present application are respectfully requested.

Respectfully submitted,

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June 13, 2003